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EXAMINER

SHENG, TOM V

ART UNIT	PAPER NUMBER
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2629

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12/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/644,899

Applicant(s)

KOLMYKOV-ZOTOV ET AL.

Examiner

Tom V. Sheng

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-31,33-64 and 66-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 66-72 and 76 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-31,33-64 and 73-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/18/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, 6, 7, 10, 15-24, 29-31, 33-36, 39, 44-49, 54-59, 63, 64 and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yashiro (US 5,754,169) in view of Heikkinen et al. (US 6,073,036), hereinafter Heikkinen.

As for claim 1 and associated claims 19, 20, 21, 31, 35, 46, 56, 73-75, Yashiro teaches a method (entry display method), comprising:

receiving input indicating that a first stylus is located proximate to a digitizer in a hovering orientation, wherein the first stylus does not contact a surface of the digitizer in the hovering orientation (fig. 1; light receivers 4, arranged over whole tablet surface 10, receive infrared ray from emitter 5 of input pen 2; moreover, a level of output signal generated by the light receivers 4 indicates when the input pen 2 is near the surface 10; column 4, lines 16-33);

determining a location of the first stylus in the hovering orientation with respect to representations of plural control elements of a user interface on a screen (by identifying a particular light receiver 4 which generates the "near" signal, a region which the input

pen 2 is approaching is specified on an area of the tablet surface 10; column 4, lines 33-41; also see fig. 3 and column 6, lines 38-45).

Yashiro further teaches that the identified region is then magnified to facilitate contact input (column 6, lines 45-59; also see fig. 4-7 and column 7, lines 1-14).

Moreover, the identified region (input region A) allows input to more than one entry item (input pen 2 is contact-scanned on the input region to input a character data or graphic data to entry items "name", "address", "occupation" or "date of birth"; fig. 7; column 7, lines 14-18).

However, Yashiro does not teach providing a focus to a first control element corresponding to the determined location of the first stylus in the hovering orientation by designating the first control element for receiving input; and

accepting input in an area of the digitizer representing the first control element, wherein the first control element is not a parent element including at least one child element.

In the same area of touch input to display, Heikkinen teaches a touch display 20 wherein as a symbol ("O" in fig. 5B) is touched, the display is modified to provide a "fisheye" magnification effect (column 8, lines 62-67). This clear visual feedback corresponds to "providing a focus to a first control element" (column 9, lines 24-26). This focus on a control element (symbol or entry) would naturally not be a parent element including at least one child element.

One of ordinary skill in the art would recognize that Heikkinen's provision of focus to one symbol could similarly be applied to Yashiro's touchless focus. Moreover, by

providing more light receivers 4 over the surface one would facilitate a focus to any single control element such as the "name" entry item accurately.

Therefore, it would have obvious to incorporate Heikkinen's teaching of providing focus to individual control element into Yashiro's touch input system, thus facilitating a better visual feedback to user entering entries input.

As for claims 3, 22, 33, 47, 57, the input of character data or graphic data corresponds to claimed electronic ink.

As for claims 4, 34, 58, Yashiro teaches that as the input pen is moved away from the tablet surface, ordinary display is returned with the results of any handwriting input displayed in corresponding positions (fig. 8; column 7, lines 18-29). These steps correspond to claimed moving of stylus away from the digitizer and subsequently withdrawing the focus from the first control element.

As for claims 6, 7, 23, 36, 48, 59, the use of a display corresponding to provide input (Yashiro: fig. 6 and 7) corresponds to claimed rendering an enlarged view of at least a portion of a representation of the first control element and accepting input directed to the first control element.

As for claims 10, 24, 39, 49, when the input area is magnified (fig. 6), it is a preparation for the first control element (for example, the name field) to receive input.

As for claims 15-17, 29, 44, 54 and 63, Yashiro teaches specifying an approaching region and accordingly changes the display, as analyzed above (fig. 3). As the near position is changed, of course the input region is changed and the display

would change accordingly. This inherently works even after inputting an entry before moving from the first area to the second area.

As for claim 18, 30, 45, 55 and 64, the changing of display based on the near position is itself a strong visual indicator when focus is provided.

3. Claims 8, 9, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yashiro and Heikkinen as applied to claim 1 above, and further in view of Higashio (US 5,900,869).

As for claims 8, 9, 37 and 38, Yashiro-Heikkinen does not teach a method of maintaining a mouse focus or keyboard focus separate from the focus corresponding to the first stylus location. Higashio teaches a method of maintaining at least a mouse focus and a keyboard focus together (See multiple cursors of figure 1; column 3, lines 16-23; column 6, lines 36-39). One of ordinary skill in the art would recognize that multiple focus of Higashio could similarly extended to include stylus focus, as multiple focus allow a plurality of users to commonly share one processor system (column 1, lines 62-65).

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate mouse focus and keyboard focus of Higashio into Yashiro-Heikkinen's stylus focus, thus providing the advantage of multiple focuses for multiple users in a processor/computer system.

4. Claims 11-14, 25-28, 40-43, 50-53 and 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yashiro as applied to claims 1 and 10 above, and further in view of Sekizawa et al. (US 6,239,789), hereinafter Sekizawa.

As for claims 11, 25, 40, 50 and 60 Yashiro does not teach preparing the first control element for receiving input as increasing a polling frequency in an area of the digitizer corresponding to the first control element. Sekizawa teaches the increase in polling frequency in an area of the digitizer corresponding to a first stylus (column 15, lines 11-16). Since the location of a stylus corresponds to the position of a cursor on a display then the detecting of a stylus is equivalent to providing focus to a control element. It would have been obvious for a person of ordinary skill in the art at the time the invention was made to use the method of increasing the polling frequency in an area of the digitizer corresponding to a first stylus, as taught by Sekizawa, to the method of receiving input indicating location proximity to a digitizer of Yashiro for the purpose of permitting improved trackability (column 15, line 15-16).

As for claims 12, 13, 26, 27, 41, 42, 51, 52, 61 and 62, Sekizawa further teaches receiving input indicating that a second stylus is located proximate to the digitizer (column 9, lines 6-11; column 5, lines 61-67; Note that determining the location of the second stylus is through the measurement of the resonant frequency through an electromagnetic transfer system as noted in the brief description for figure 7 on column 7 lines 51-53). It would have been obvious for a person of ordinary skill in the art at the time the invention was made to incorporate the input of a second stylus located proximate to the digitizer in a hovering orientation, as taught by Sekizawa, to the input

of a first stylus located proximate to a digitizer, of Yashiro for the advantage of providing tracking to multiple styli (column 6, lines 46-47; The term stylus is equivalent to position indicator). Obviously, the provision of a focus of Yashiro for a first stylus is similarly provided to a second stylus.

As for claims 14, 28, 43 and 53, Seybold does not teach a method where focus to the second control element is provided concurrent with focus to the first control element. Sekizawa teaches a method of concurrently detecting styli (column 11, lines 62-65). The styli are detected concurrently because both of the styli are placed on the detection device at the same time, as shown in figure 4c. As stated earlier with respect to claim 19, focus is provided after the location of the stylus on the digitizer is determined. Since Seybold teaches the provision of focus to a control element after receiving input indicating that a stylus is located proximate to a digitizer then it would have been obvious to use the same method for providing focus to a second control element. The focus to the second control element would be due to the detected location of the second stylus. It would have been obvious for a person of ordinary skill in the art at the time the invention was made to use the method of detecting styli, as taught by Sekizawa, to the method of providing focus to a control element of Seybold such that the modified combination would produce a method of providing focus to a second control element that is concurrent to the focus of a first control element for the purpose of permitting higher efficiency in practical use (column 15, lines 34-35).

Allowable Subject Matter

5. Claims 66-72 and 76 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record teaches the limitations "in response to determining that the first control element is not stylus-focusable; determining whether a parent element ... accepting input in the parent element" of claim 76. Claims 66-72 are dependent from claim 76.

Response to Arguments

7. Applicant's arguments with respect to claims 1-64 and 73-75 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V. Sheng whose telephone number is (571) 272-7684. The examiner can normally be reached on 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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